

MEMORANDUM

Engineering Division



To: Honorable Mayor and City Council
Through: Charles Lawson, City Manager
From: Greg Armendariz, Public Works Director/City Engineer
Subject: **Odor Action Plan Update**
Date: December 12, 2006

This memorandum summarizes the Odor Action Plan progress over the last 3 years, the ongoing efforts, and next steps. The City has also increased the outreach and awareness to the community, and the good news is that the number of complaints received over the past 3 years has dropped.

Period	# of complaints*
Oct 2003-Sept 2004	372
Oct 2004-Sept 2005	215
Oct 2005-Sept 2006	124

*Number of Complaints received by Bay Area Air Quality Management District (BAAQMD)

Human habitats create organic waste that requires biological processes for treatment. Several facilities processing organic waste are located adjacent to Milpitas. Biological processes emit odors. Since October 2003, staff began working with stakeholders to develop the Odor Action Plan. The Odor Action Plan focused on identifying biological processes and implementation of best management practices to reduce odors to a baseline level. It is not realistic to expect odors to be completely eliminated as long as the biological processes continue to occur. Some of the potential odor sources are described below (all located outside of Milpitas).

Compost Facility: There are two compost facilities in the area. One is located at Newby Island, west of Dixon Landing/880 interchange, and one is at Zanker Landfill along Zanker Road, north of Highway 237. The Newby Island facility, operated by Allied, is a much larger facility than the Zanker Road facility. Both facilities are located in San Jose. The compost process is as follows: plant and other organic material is ground and placed in piles (called windrows) which are allowed to decompose in order to form compost. During the active composting period, the windrows are turned (mixed) every three days or so to allow air introduction and to redistribute heat that is generated during the process. The resulting compost material may be used as a soil amendment.

When the windrows are turned as part of the composting process, odors may be released. Allied staff uses a wind gauge to monitor wind direction so that windrows are turned when the wind direction is to the west (away from Milpitas). The windrows were previously located near the intersection of I-880/Dixon Landing Road but have been relocated about one mile to the southwest. Finished compost and green waste handling/grinding currently occurs west of the Recyclery about one-quarter mile from the Newby Island entrance.

Landfills. There are two landfills in the area, both outside the City of Milpitas. The Newby Island landfill is located to the west of Milpitas on the west end of Dixon Landing Road. Zanker landfill is located along Zanker Road north of Highway 237. Each facility spreads, compacts and covers solid waste generated by local commercial and residential customers, including Milpitas. This process occurs daily.

Wastewater Treatment Plant. A regional wastewater treatment plant is located west of Milpitas and north of Highway 237. The facility treats wastewater from local cities including Milpitas. The plant uses a combination of biological, chemical and mechanical processes to remove solids from the wastewater before discharging the cleaned water into South San Francisco Bay. The removed solids are digested (stabilized) in enclosed tanks before being transferred to lagoons for further stabilization and to beds for drying. Odors may be discharged when the sludge drying beds are turned and when the sludge is collected during the summer months. Previously the State required the sludge to be stockpiled for up to 2 years. Treatment Plant staff successfully lobbied to change the permit to allow sludge to be collected from the drying beds and hauled off-site in one move during the fall season. Only one old stockpile remains on-site. In addition, treatment plant staff uses a wind gauge to schedule operations and have purchased a vehicle-mounted deodorizer. Treatment plant staff is conducting a master plan study of their lands to determine the feasibility of relocating sludge drying beds to the west.

Cargill Salt. Cargill collects salt from San Francisco Bay water. The seawater is collected in ponds where water is allowed to evaporate. The brine is transferred to a series of ponds resulting in saltier water until in the final collection area, salt solids result. This salt is then harvested for commercial use. During the summer of 2002, a pump broke and one of the ponds was emptied and the pond bottom was exposed to the atmosphere where organic bottom material began to decompose rapidly in the warm temperature. The result was a significant odor emission. Cargill has implemented an emergency gravity-feed system in the event a pond level drops, to prevent this problem from reoccurring.

BAAQMD. The Bay Area Air Quality Management District (BAAQMD) is responsible for investigation and enforcement of odor controls within Santa Clara County, with the exception of compost sites located within the City of San Jose. The BAAQMD number to report complaints is 1-800-334-6367. Staff has published the number frequently and encouraged the public to make complaints. BAAQMD staff is not permitted to initiate an investigation until they receive a complaint. The Local Enforcement Agency (City of San Jose code enforcement) is responsible for investigation and enforcement of odor controls generated from compost sites within the San Jose city limits. The most common request from the stakeholders was to receive real-time information about complaints so they could review their operations. BAAQMD staff implemented a Rapid Notification e-mail system and complaints are received now received real-time. Field investigators respond to complaints and try to trace the source. If 5 or more complaints are received after hours, then a field inspector is dispatched at that time. If less than 5 complaints are received, then the investigation will occur the following business day.

City of Milpitas. City staff continues to monitor odor complaints. The only organic wastes that the City has regulatory authority over are the collection and transportation of wastewater and solid waste to their processing facilities. Once these materials are delivered to their facilities, regulatory authority transfer to other jurisdictions. City staff acknowledges the continued cooperation of the regulatory authorities and stakeholders to improve their processes and reduce odor complaints.

Next steps: The City's odor consultant, Calrecovery, is correlating weather data with complaints and reviewing the quarterly reports on the pilot compost windrow relocation program. An update will be available soon. The consultant will be making recommendations noting if reasonable measures have been implemented and a baseline level of odor complaints has been achieved.